LAGUTIN, B.L.; MUROMTSEV, A.M.; YUSHCHAK, A.A.

In memory of Nikolai Nikolaevich Zubov. Meteor.i gidrol. no.5:59-60 My '61. (MIRA 14:4)
(Zubov, Nikolai Nikolaevich, 1885-1960)

ISTOSHIN, Yuriy Vladimirovich; LAGUTIN, Boris L'vovich; PROSKURYAKOVA, G.M., red.; YEZHOVA, L.L., tekhn. red.

[In the seas and oceans] V morskikh i okeanakh. Moskva, Vysshaia shkola, 1962. 153 p. (MIRA 16:6)
(Oceanography)

LAGUTIN, B.L., kand.tekhn.nauk; TOLMAZIN, D.M.

Theoretical solution of the problem of artificial regulation of the exchange of waters through the Kerch Strait. Meteor. i gidrol. no.4:18-21 Ap '65. (MIRA 18:4)

1. Gosudarstvennyy okeanograficheskiy institut.

KOVALEV, G.Ye., gornyy inzh.; PANARIN, I.A., gornyy inzh.; LAGUTIN, G.M., gornyy inzh.

Economic effectiveness of using around-the-clock combined brigades in the organization of mining operations. Ugol' Ukr. 6 no.9:39 S '62. (MIRA 15:9)

1. Normativno-issledovatel'skaya stantsiya tresta Kommunarskugol'.
(Coal mines and mining)

KOVALEV, G.Ye., inzh.; PANARIN, I.A., inzh.; LAGUTIN, G.M., inzh.

Economic efficiency of multishift operation. Ugol'. prom. no.6:11-16 N-D '62. (MIRA 16:2)

1. Trest "Kommunarskugol'".
(Lugansk region—Coal mines and mining—Labor productivity)

LAGUTIN, Ivan Aleksandrovich; VASIL'YEV, A.I., redaktor; MAKSIMOVICH, A.I., redaktor; SUDAK, D.M., tekhnicheskiy redaktor

[Gathering and processing of mushrooms] Zagotovka i pererabotka gribov. Pod red. A.I.Vasil'eva. Moskva, Gos. izd-vo torgovoi lit-ry, 1956. 36 p. (MLRA 10:1)
(Mushrooms)

LAGUTIN, K.

What the competition for residential and public buildings has shown us. Zhil.-kom.khoz. 9 no.10:12-14 '59. (MIRA 13:2)

1. Zamestitel' predsedatelya tsentral'noy komissii vserossiyskogo smotra zhilykh i grazhdanskikh zdaniy, nachal'nik Glavnoy inspektsii gosarkhstroy-kontrolya Ministerstva kommunal'nogo khozyaystva RSFSR.
(Apartment houses) (Public buildings)

LAGUTIN, K., arkhitektor

Eliminate shortcomings in building cities. Zhil.-kom.khoz. 10 no.4:3-4 '60. (MIRA 13:6)
(City planning)

VAGSHUL', I., inzh;; LAGUTIN, K., arkhitektor

Pay more attention to the construction of underground structures in cities. Zhil.-kom. khoz. 10 no.8:10-11 '60. (MIRA 13:9)
(Sewarage) (Water-supply engineering)

SOV/169-59-3-2979

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 3, p 136 (USSR)

AUTHORS: Kashcheyev, B.L., Dudnik, B.S., Lagutin, M.F., Lysenko, I.A., Tolstov, V.V.

TITLE: Radar Observations of the Meteor Activity

PERIODICAL: Mezhdunar. geofiz. god. Inform. byul., 1958, Nr 1, pp 38-42 (Engl. Res.)

ABSTRACT: The article contains the results of meteor activity observations, which were performed in Khar'kov in accordance with the IGY program during the period from July to December 1957. The observations were carried out by a radar method in the 72 Mc range. More than 10,000 meteors were recorded. A circuit is discussed which may be used for meteor observations in the presence of strong noise.

Authors' résumé

Card 1/1

SOV/169-59-4-4033

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 4, p 123 (USSR)

AUTHORS: Dudnik, V.S., Kashcheyev, B.L., Lagutin, M.F., Lysenko, I.A.

TITLE: The Measurement of the Meteor Velocity by the Diffraction Method

PERIODICAL: Mezhdunar. geofiz. god., Inform. byul., 1958, Nr 1, pp 51 - 62 (Engl. Res.)

ABSTRACT: The Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute) performed radar measurements of the meteor velocity using the pulse method. The changes of the distance to the meteor cause an interference of the reflected waves and echo amplitude variations. Hence, the meteor velocity can be found after having determined the distance to the meteor. The paper contains a description of the principal circuit diagram of the device used for studying the meteor stream of the Geminids. A velocity of 35 $\pm$ 2.5 km/sec was obtained for the meteors of this stream.

Card 1/1

DUDNIK, B.S.; KASHCHEYEV, B.L.; LAGUTIN, M.F.; LYSENKO, I.A.; TOLSTOV, V.V.; DELOV, I.A.

Studying meteoric activity by means of radar on a frequency of 72 mc. Izv.vys.ucheb.zav.; radiofiz. 1 no.2:66-70 '58. (MIRA 11:11)

1. Khar'kovskiy politekhnicheskiy institut.
(Meteors) (Radar in astronomy)

SOV/109-3-11-5/13

AUTHORS: Dudnik, B.S., Kashcheyev, B.L., Lagutin, M.F. and Lysenko, I.A.

TITLE: A Protection System Against the Pulse Interference in the Equipment for the Recording of Meteoric Activity (Sistema zashchity ot impuls'nykh pomekh v apparature, registriruyushchey meteornuyu aktivnost')

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 11, pp 1379 - 1383 (USSR)

ABSTRACT: The equipment developed by the Astronomical Observatory imeni Engel'gart (Ref 1) for the observation of the activity of meteors is inadequate in that it is subject to the influence of external interference. The equipment was therefore modified in the Khar'kovskiy politekhnicheskiy institut (Kharkov Polytechnical Institute) in such a way as to eliminate the effect of pulse interference. The resulting protection system consists of a signal channel and an interference channel (Figure 1). Both channels are provided with identical receivers in which it is possible to tune the local oscillator and the ultra-high frequency units. The receivers are connected to two antennae, A_C and $A_П$. The receiver of the signal

Card1/4

channel is tuned to the frequency f_c of the radar station while the receiver of the interference channel is tuned to a frequency f_Π which is chosen in such a way that $f_\Pi = f_c \pm k\Delta F$, where ΔF is the bandwidth of the receiver and k is the de-tuning coefficient which is of the order of 4-8. The difference in the centre frequencies of the two receivers is necessary in order to make the interference channel insensitive to the useful signals; on the other hand, both the receivers are sensitive to the interference since its energy is spread over a spectrum which is much wider than that of the signal. The video-detector of the interference channel is followed by a selector-amplifier which produces rectangular pulses having an amplitude of 200 V; the pulses are independent of the intensity of the interference provided the latter is greater by a factor of 2.5 than the noise level. The output of the video-detector of the signal receiver is also followed by a

A Protection System Against the Pulse Interference in the Equipment for the Recording of Meteoric Activity

selector-amplifier which produces rectangular pulses. The length of the pulses is proportional to the duration of the signal at the output of the detector (at the limiting level). These pulses are applied to a special stage consisting of two tubes (Figure 2) having a common cathode load consisting of two tuned circuits. Normally, this device is conducting but in the presence of a negative pulse, the resonant circuits produce an oscillatory transient, as can be seen in Figure 3. If the time constants of the resonant circuits are suitably chosen, the output transient of the circuit of Figure 2 will contain a positive overshoot. The output signal from this circuit (which is, in effect, a delay circuit) is applied to the input of a selector tube which can be opened by the positive peaks. The second grid of the selector tube (pentode) is connected to the output of the interference channel. Consequently, in the presence of a negative pulse in the interference channel, the selector tube is closed even if a positive peak is delivered by the signal channel. An interference pulse which appears in both the channels will therefore be

A Protection System Against the Pulse Interference in the Equipment for the Recording of Meteoric Activity

stopped at the selector tube. The above protection system is employed at the meteor station of the Khar'kov Polytechnical Institute, which is carrying out investigations for the IGY (Refs 2 and 3). The improvement obtained by using the protection system is illustrated in Figure 4a and 4b; the first figure shows a record of the meteoric activity in the absence of the protection system, while the second picture illustrates the improvement. There are 4 figures and 4 Soviet references.

SUBMITTED: April 16, 1958

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3(1) SOV/33-36-1-19/31

AUTHORS: Dudnik,B.S., Kashcheyev,B.L., Lagutin,M.F.,and Lysenko,I.A.

TITLE: Velocity of Meteors of the Gemini Shower

PERIODICAL: Astronomicheskiy zhurnal, 1959,Vol 36,Nr 1,pp 141-145 (USSR)

ABSTRACT: In the present paper the authors give the results of measurements of the velocities of meteors made by radio-echo technique during the Gemini shower on December 10-14, 1957 from 23^h to 5^h in Khar'kov. V.V.Tolstov and D.N.Luk'yashko had a share in the measurements. 569 velocities of meteors were determined. 226 meteors had velocities from 32.5 to 37.5 km/sec. Here the mean velocity was 35.9 km/sec.
There are 6 figures and 2 references, 1 of which is Soviet, and 1 English

SUBMITTED: March 5, 1958

Card 1/1

37946
S/035/62/000/005/041/098
A055/A101

3.1710

AUTHORS: Kashcheyev, B. L., Dudnik, B. S., Lagutin, M. F., Lysenko, I. A.

TITLE: Apparatuses for radar observation of meteors

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 45-46, abstract 5A349 (V sb. "Meteory", no. 1, Khar'kov, Khar'kov university, 1960, 3-10)

TEXT: The authors describe a radar system permitting the investigation of meteoric phenomena. They examine the functional circuits of the apparatuses for measuring the number of meteors at the 36.9 Mc frequency. To enhance the reliability of the obtained results, a pulse-noise prevention device is employed, this device making use of the difference in the spectra of the periodical sequence of rectangular radio pulses and pulse noises. An apparatus is described that permits determining the meteor speeds, the height of the reflecting region of the meteor trail, the radiants and the orbits; it also permits the investigation of the meteor trail drift.. The pulse-coherent method is used for the observation of the trail. For studying turbulent motions in the meteor zone of the atmosphere, extension receiving relay stations are used, into which is fed

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Apparatuses for radar observation of meteors

S/035/62/000/005/041/098
A055/A101

the reference signal from the master stage of the main transmitter; the recording of the reflections from the meteor trail, received at several spaced stations, is effected on a film at the main station.

B. K.

[Abstracter's note: Complete translation]

X

Card 2/2

3 7953

S/035/62/000/005/064/098
A055/A101

3.5140

AUTHORS: Lebedinets, V. N., Lagutin, M. F., Lysenko, I. A.

TITLE: Influence of the atmospheric turbulent wind on measurments of velocities and radiants of meteors

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 65, abstract 5A497 (V sb. "Meteory", no. 1, Khar'kov, Khar'kovsk. un-t, 1960, 21-23)

TEXT: The authors examine the influence of the atmospheric turbulent wind upon the precision in the measurement of the velocities and of the radiant coordinates of meteors. The turbulent wind velocity gradient was measured by the method of the spaced reception of radio waves reflected from the meteor trails (see abstract 5A349). On the basis of 302 meteors recorded at two points, the authors determined the error in the measurement of the velocities and of the radiant coordinates of meteors for a variation of the atmospheric wind velocity gradient from 0 to 80 $m \cdot sec^{-1} \cdot km^{-1}$. It is shown that the turbulent wind leads to considerable errors in the determination of the meteor radiant

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S/035/62/000/005/064/098
Influence of the atmospheric turbulent wind ... A055/A101

coordinates; the influence of the turbulent wind upon the precision in the determination of the velocity of the meteors is insignificant.

B. Kashcheyev

[Abstracter's note: Complete translation]

Card 2/2

KASHCHEYEV, B.L.; LEBEDINETS, V.N.; LAGUTIN, M.F.

Orbit of Geminids in 1959. Meteory; sbor.st. no.1:25-37 '60.
(Meteors--December) (MIRA 15:8)

25489
S/021/61/000/005/009/012
D215/D304

3.1700 (1046, 1126, 1060)

AUTHORS: Kashcheyev, B.L., Lahutin, M.F., and Lysenko, I.A.

TITLE: Investigating individual radiants of the geminides shower

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 5, 1961, 623 - 626

TEXT: During the 1958 IGY it was arranged at the Khar'kov Polytechnic Institute to determine the orbits and speeds of meteor particles as well as the velocity and direction of the drift of ionized traces. Trajectories of meteor particles were investigated by observing radio echos of three separate receiving stations. The radiolocating apparatus consisted of a transmitter, and high sensitive receiver, working on 8 m waves, and from the receiving stations 4 and 8 km distant from the home station. Signals received at these stations were transmitted back to the home station and, together with the signals received directly at the home station, were regi-

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Investigating individual ...

stered on photofilm. In one day, an apparatus like this can register 150 orbits of meteors up to 7^m stellar magnitude. From December 9-14, 1959 in the maximum epoch of gemenides shower, more than 400 registrations were received. Using the 'Ural' computer the elements of the orbits were calculated. The results were compared with the results from Jodrell Bank (England) and the Harvard Observatory (USA), with a good coincidence. From this data the daily change for the radiant was found: $\Delta\alpha \simeq +0.90$ $\Delta\delta \simeq -0.25$. This method of finding the radiants of separate meteors allows one to measure the mean velocity of the meteors with greater accuracy. The value calculated was 35.5 km/sec. which is the mean value obtained from the large number of meteor velocities; their radiants were grouped round the mean value of the registered radiant. It was established that in the range 30-40 km/sec. the decrease in the meteor velocity before reaching the point of maximum ionization was 0.6 km/sec. Therefore, the preatmospheric velocity of the gemenides shower was 36.1 km/sec. which appears to be in close conformity with F.L. Whipple's results (Ref. 3: Astr. Jour. 59, 201, 1954). Experiments

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25489
S/021/61/000/005/009/012
D215/D304

Investigating individual ...

showed also that in 10 % of cases the accuracy is restricted by the influence of the turbulent action of winds. There are 1 table, 2 figures and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: J.C. Gill, and J.G. Davies, Mon. Nat. Royal Astron. Soc. 116, 105, 1956; F.L. Whipple, Astr. Journ. 59, 201, 1954.

ASSOCIATION: Kharkivs'kyy politekhnichenyy instytut (Khar'kov Polytechnic Institute)

PRESENTED: V.G. Bondarchuk, Member AS UkrSSR

SUBMITTED: May 25, 1960

Card 3/3

29573
S/033/61/038/004/007/010
E133/E135

3,2440 (1041,1395)

AUTHORS: Kashcheyev, B.L., Lebedinets, V.N., and Lagutin, M.F.

TITLE: Radio echo determinations of the orbits of individual meteors

PERIODICAL: Astronomicheskiy zhurnal, vol.38, no.4, 1961, 681-691 + 1 plate

TEXT: The results obtained from visual observations of meteors are summarised in Ref.1 (F.L. Whipple, Astron. J., Vol.59, 201, 1954). The radio echo method of observing meteors has been in use at Jodrell Bank since 1958 (Ref.2: J.C. Gill, J.G. Davies, Monthly Notices Roy. Astron. Soc., Vol.116, 105, 1956). One result has been the discovery of large numbers of faint meteors (7-8 mag.) with almost circular orbits inclined at a large angle to the ecliptic (Ref.3: Meteory, Sbornik statey, IIL (Meteors, Symposium, IIL) 1959). The lifetime of these particles must be small (Ref.4: L. Kresák, Byul. Astron. in-tov Chekhoslovakii (Bulletin Astronom. Institut. Czechoslovakia) Vol.11, 1, 1960). Apparatus was installed at Khar'kov in December 1958 for the determination of individual meteor orbits. Observations have been

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Radio echo determination of the ....

made since August 1959. The general layout is indicated in Fig.1. The radio-location equipment is at O, B and K, where OB = = 7100 m and OK = 4500 m (± 10 m). The transmission frequency is 36.9 Mc/s and the duration of the impulse is 10 microsec at 500 impulses per sec. The stations at B and K transmit the data they receive back to O, after amplification. The resultant traces are photographed together. An example is shown in Fig.2 (where the sinusoidal curve gives the Doppler frequencies determining the drift of the track). The position of the radiant and of the meteor orbit is determined by Kleiber's method (Ref.7: I.A. Kleiber, Opredeleniye orbit meteornykh potokov, SPb, 1891 (Determination of the orbit of a meteor stream)) and is done by an electronic computer; otherwise it would be impossible to reduce all the data. In order to check the accuracy of the calculated orbits, observations were made of 298 members of the Geminid stream during December 9-14, 1959. The authors first consider the braking effect of the Earth's atmosphere so that they can deduce the velocity outside the atmosphere from the observed velocity. They arrive at the equation:

Radio echo determination of the ...

$$\Delta v_m = -\frac{1.22}{v_\infty \sigma} \qquad (15)$$

which gives the velocity change in terms of the initial velocity and the parameter σ (the coefficient of heat transfer). They assume that $\log \sigma = -11.2$ and that it does not vary much with the mass (Ref.11: L.G. Jacchia, Smith. Contrib. Astroph., Vol.2, No.9, 1958). They find that a correction of ~ 0.6 km/sec should be made, therefore, to the observed Geminid velocity. The resultant r.m.s. error in the velocity measurements is ± 1.8 km/sec for a single meteor. This is due to four causes: a) inaccuracies in the allowance for atmospheric braking; b) the effect of atmospheric turbulence on velocity measurements; c) errors in velocity measurements due to diffusion of the meteor track; d) inaccuracy in the readings of the number of impulses per Fresnel zone. The data on the Geminids indicate a systematic change in the position of the radiant, and the orbital elements, with solar longitude. The authors compare their results with optical measurements for meteors of magnitude -5 to 0 (F.L. Whipple, Ref.1) and for meteors of magnitude 0 to +3 (Ref.14: G.S. Hawkins.

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Radio echo determination of the ...

R.B. Southworth, Harv. Reprint Series II-128, 1958). The average orbital elements of fifteen meteors in Ref.1 agree with the present measures, as does the systematic change in the orbital elements. The results in Ref.14 appear to be less accurate, but also agree with the limits of error. That there was a change in the position of the radiant was already known, but this change in the orbital elements is new. Since it appears to be connected with the mass of the particles, it can only be explained by some form of braking of the meteors (e.g. by the Poynting-Robertson effect). Previous observations (Ref.17: B.L. Kashcheyev, V.N. Lebedinets. Astron. zh., Vol.36, 629, 1959) indicate that on the night of December 12-13 1959, a maximum was observed for meteors in the range 2-4 mag., but on the following night (13-14) the maximum was at about zero magnitude. It can be estimated from this, on the basis of the Poynting-Robertson effect, that the age of the stream is about 30 000 years (assuming a meteor density of 4 gm/cc).

There are 8 figures, 3 tables and 18 references: 10 Soviet-bloc and 8 non-Soviet-bloc. The four most recent English language references read as follows:

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29573

Radio echo determinations of the ... S/033/61/038/004/007/010
E133/E135

Ref.1: F.L. Whipple, Astron. J., Vol.59, 201, 1954.
Ref.2: J.C. Gill, J.G. Davies, Monthly Notices Roy. Astron. Soc., Vol.116, 105, 1956.
Ref.11: L.G. Jacchia, Smith. Contrib. Astroph. Vol.2, No.9, 1958.
Ref.14: G.S. Hawkins, R.B. Southworth, Harv. Reprint Series II-128, 1958.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina
(Khar'kov Polytechnical Institute imeni V.I. Lenin)

SUBMITTED: July 18, 1960

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43280

S/831/62/000/008/001/016
E032/E114

3.2500

AUTHORS: Kashcheyev, B.L., Dudnik, B.S., Lagutin, M.F., Lebedinets, V.N., Luk'yashko, D.N., and Lysenko, I.A.

TITLE: Radar observations of meteors at Khar'kov

SOURCE: Ionosfernyye issledovaniya (meteory). Sbornik statey, no.8. V razdel programmy MGG (ionosfera). Mezhduved. geofiz. kom. AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 7-20

TEXT: This paper reports the results of analyses of radio echoes from meteor trails which were recorded at the Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina (Khar'kov Polytechnical Institute imeni V.I. Lenin) during July 1957 - May 1959. The observations were in accordance with the IGY programme and were carried out at 73.2 Mc/sec and 36.9 Mc/sec. Special measures were taken to suppress extraneous interference. Pulse lengths of ten microseconds were employed at repetition frequencies up to 500 cps and power per pulse ~50-70 kW. The detector sensitivity was 5×10^{-14} W. The half-power beamwidth in the final

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experiments was ± 20° (vertical plane) and ± 17° (horizontal plane). The meteor velocities were measured by a diffraction method in which the velocities relative to earth were determined from signal amplitude fluctuations. Altogether 300 000 reflections from sporadic meteors were recorded and average diurnal variations in the number of meteors were obtained throughout the period. Fig. 10 shows three typical distributions (number of meteors versus mean sidereal time). The velocity distributions were also determined as functions of time and are reproduced in the paper. Finally, the mass distribution of sporadic meteors was found from the lengths of the reflected pulses. It was found that

$$N = N_o m^{s-1} \quad \text{where} \quad s \sim 2.$$

Owing to the large beamwidth, weak meteor showers could not be detected against the sporadic background. Brief details are given about the following showers which were the only reliably detected showers: Quadrantids, Lyrids, Geminids, η-Aquarids and Arietids (daytime). There are 16 figures.

Card 2/3 2

ACCESSION NR: AT4043266 S/3105/63/000/02-/0012/0021

AUTHOR: Lagutin, M. F.

TITLE: Technique and error of the determination of meteor orbits by radar

SOURCE: Kharkov. Politekhnicheskiy institut. Kafedra osnov radiotekhniki. 5 razdel programmy* MGG: Ionosfera i meteory*. Meteory*; sbornik statey, no. 2/3, 1963, 12-21.

TOPIC TAGS: meteor, meteor orbit, radio location, radar, oscillograph

ABSTRACT: A method is described for processing raw data which is in the form of reflected radio signals from a meteor trail, recorded on film from the face of a cathode ray tube. Only those recordings are accepted for processing in which there are at least three distinct zones separated by maxima (or minima) in the amplitude-time function on at least three recordings. Each recording is rated for the quality and number of Fresnel zones used for computation of velocity and time displacement between recordings, according to a 5-point relative scale which is different for each trail. The dimensions and number of pulses in each zone, as well as their time relationship to the same zones on other recordings are noted. Tables are presented of times at

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which reflection occurred, range to target, and quality and type of reflection: A - unsaturated, B - saturated, AB - intermediate, C - supersaturated. For type A, the ratio of the signal amplitudes of the first and second maxima is used to determine the coefficient of ambipolar diffusion. All time displacements are averaged over all recordings. Velocities are computed separately for each zone and averaged with weightings which are proportional to their dimensions. From these data, the stellar magnitude of the meteor is determined and electron concentrations at the points of maximum ionization in the trail are computed. Separate formulas are given for electron concentration, α, for A-type meteors ($\alpha < 2.4 \times 10^{12}$ electrons/cm) and B and C-type meteors ($\alpha > 2.4 \times 10^{12}$ electrons/cm). Error analysis of the data has shown that in determining the velocities and radiants of individual meteors the error is practically independent of velocity and is about 3% in velocity and 3° in radiant. Random deviations from this accuracy are mostly caused by noise. The radio method was successfully used to determine the trajectories of two simultaneous meteor streams, Arietid and ξ-Perseid, in June 1960. The accuracies obtained were about an order of magnitude better than the accuracies of the statistical measurements of Almond, Bullough and Hawkins (Jodrell Bank Ann., 1, No. 3, 1961, p. 299). A new meteor stream was also discovered during this time. Orig. art. has: 9 tables, 10 formulas and 5 photographs.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R000928420015-0"

ACCESSION NR: AT4043266

ASSOCIATION: Kafedra osnov radiotekhniki, khar'kovskiy politekhnicheskiy institut (Department of Basic Radio Engineering, Khar'kov Polytechnical Institute).

SUBMITTED: 00 ENCL: 00 SUB CODE: AA

NR REF SOV: 006 OTHER: 002

Card 3/3

ACCESSION NR: AP4039722 S/0141/64/007/002/0225/0231

AUTHOR: Delov, I. A.; Lagutin, M. F.; Ly*senko, I. A.

TITLE: Investigation of parameters of some turbulent flows by radiolocation of meteor trails

SOURCE: IVUZ. Radiofizika, v. 7, no. 2, 1964, 225-231

TOPIC TAGS: radar tracking, meteor, pulse communication, ionospheric radio wave, tropospheric radio wave

ABSTRACT: Apparatus employing a pulse-coherent method of radar tracking of meteor trails, described in detail elsewhere (Meteory*, No. 1, Collection of articles, izd. KhGU, 1960) has been used to investigate the turbulent motion in the meteor zone of the upper atmosphere. The means used to obtain coherence in the main apparatus and in the relaying apparatus are described. The parameters of turbulent motion obtained in this investigation (the pulsational velocity U of large-scale vortices, their characteristic dimension L, and their decay time T, the pulsational velocity of the vortices of the energy dissipation interval U_l, their characteristic dimension l, their lifetime t_l, and the gradient of the turbulent-motion velocity are found to be of the same order as obtained by J. S. Greenhow and E. L. Neufeld

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ACCESSION NR: AP4039722

(Proc. Phys. Soc. v. 75, 228, 1960 and No. 1, 475, 1959). The authors believe, however, that the procedure they used to process the radar data, based on local turbulence properties, gives more correct estimates of the turbulent-motion energy ($\varepsilon \sim 1200$ and 3200 cm^2/sec^3 for day and night, respectively) than is obtained by Greenhow and Neufeld. It is also shown that many statistical parameters of the turbulence (energy of turbulent motion, pulsational velocity of large-scale vortices, velocity gradient of turbulent motion) are subject to diurnal variations. This gives grounds for assuming that the "intensity" of the turbulence in the meteor zone is controlled by the sun. Orig. art. has: 5 figures and 4 formulas.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute)

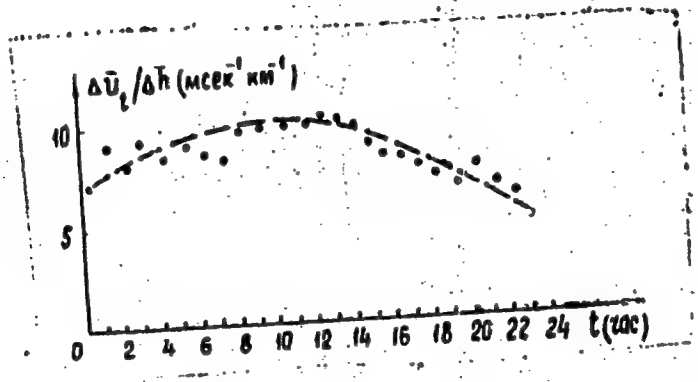
SUBMITTED: 09May63 ENCL: 01

SUB CODE: ES, EC NR REF SOV: 011 OTHER: 003

Card 2/3

ENCLOSURE: 01

ACCESSION NR: AP4039722



Diurnal variations of turbulent wind gradient $^{-1}$ $_{km}$ $^{-1}$
(abscissa - local time, ordinate - millisecond

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L 17619-65 EWT(d)/EWT(l)/EWG(k)/EEC-4/EWA(h) Pn-4/Pz-6/Pg-4/Peb/Pl-4/Pl-4
AEDC(a)/APWL/RAEM(c)/ESD(t) JHB/GM

ACCESSION NR: AP4043682 S/0109/64/009/008/1494/1495

AUTHOR: Lagutin, M. F.; Kashcheyev, B. L.

TITLE: Influence of the polarization effect on radio signals scattered by meteor trails

SOURCE: Radiotekhnika i elektronika, v. 9, no. 8, 1964, 1494-1495

TOPIC TAGS: meteor trail, meteor trail signal scattering, meteor observation, meteor study, radio signal scattering

ABSTRACT: The polarization effect on radio signals scattered by meteor trails was investigated by means of two independent and identical transmitters operating at the 36.0 mc frequency. The repetition rate of the pulses generated by the transmitters was 500 pulses/sec with a time shift of 140 μsec. They were loaded with identical antennas which were polarized in mutually perpendicular planes and had radiation patterns which were approximately identical, on the basis of recorded meteor radio echoes. From the antenna switches,

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L 17619-65
ACCESSION NR: AP4043682

the signals scattered by meteor trails were fed to the plates of a cathode-ray tube. A sawtooth voltage of a duration of 0.15 sec was fed to a second pair of plates. The envelopes of the signals of different polarity were recorded simultaneously. The measurements were carried out during four days, mostly in a northern direction, and the occurrence of the polarization effect was detected for ~ 50% of the signals. For trails with an electron density $q << 10^{12}$ el/cm, no shifts in the envelopes of time-amplitude characteristics were detected. At $q \approx 10^{12}$, the normalized polarization ratio often increases at the end of the scattering process, while at $q >> 10^{12}$ it increases both at the beginning and the end of recording. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 25Jun63 ENCL: 00 SUB CODE: AA,EC

NO REF SOV: 001 OTHER: 003

Card 2/2

SOURCE CODE: UR/0020/65/164/006/1256/1259

AUTHOR: Kashcheyev, B. L.; Lebedinets, V. N.; Lagutin, M. F.

ORG: Khar'kov Polytechnic Institute im. V. I. Lenin (Khar'kovskiy politekhnicheskiy institut)

TITLE: Characteristics of the motion of small meteoric bodies

SOURCE: AN SSSR. Doklady, v. 164, no. 6, 1965, 1256-1259

TOPIC TAGS: meteor detection, meteor observation, radar meteor observation, meteor radiant, meteor trail

ABSTRACT: The authors describe some of the results obtained from a year-long series of radar measurements of individual radiants and velocities of meteors, conducted from Nov. 1959 through Dec. 1960 at the Khar'kov Polytechnic Institute (Khar'kovskiy politekhnicheskiy institut). The velocity measurements were performed by means of the pulse-diffraction method, and the measurements of the radiant coordinates by the method of dispersed reception of radio waves (dispersed on the forming meteor trail). A radar station with an 8-m wavelength was used. The orbits of 12,500 meteoric bodies, which generated meteors brighter than about +7m, were calculated on an electronic computer. In processing the observational data, the authors paid particular attention to the calculation of the effect of the selectivity of the radar method of observation. In converting from the measured distribution of orbits to the true distribution it was necessary to take into account the "geometric factor," the "physical factor," and the "astronomical factor." In addition to the two basic types of orbits of large

UDC: 523.531

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L 9551-66

ACC NR: AP5027220

meteors known from photographic observations, the authors found the following: a) orbits with $e < 0.7$ and $30^\circ < i < 165^\circ$, and b) the major portion of the small meteors moves in elongated orbits with $e > 0.7$, which in shape are close to those of short-lived comets but differ from the comets by considerably smaller perigee distances and dimensions ($a < 3$ a.u.) (i is orbit inclination, a is large semiaxis, and e is eccentricity). Photographic observations showed type-b orbits for several meteor showers for which no ancestor-comets were found. The detection of the two new types of orbits is of great significance for the study of the origin and evolution of meteoric substance. The presence of a large number of meteor showers with type-b orbits shows that there should be a large number of short-lived comets with this type of orbit in the solar system. Due to the closeness to the Sun of the perihelion, the lifetime of comets with type-b orbits is very short. Evidently, it is considerably shorter than the lifetime of the existence of the meteor trails generated by such comets. Presented by Academician V. G. Fesenkov March 13, 1965. Orig. art. has: 1 figure and 4 formulas. [08]

SUB CODE: EC, AA / SUBM DATE: 13Mar65 / ORIG REF: 003 / OTH REF: 006/

ATD PRESS: 4157

Card 1/2

LAGUTIN, N.

Correlation between the indices of industrial and agricultural development in the U.S.S.R. Vop. ekon. no.11:55-63 N '60. (MIRA 13:11)

(Russia--Economic policy)

LAGUTIN, N.

Prospects for narrowing the difference between living standards of the rural and city population. Biul. nauch. inform.: trud i zar. plata 4 no.1:42-47 '61. (MIRA 14:3)
(Cost and standard of living)

BUZLYAKOV, N.I.; ZAREMBA, B.V.; LAGUTIN, N.S.; MAYYER, V.F.; FETISOV, S.M.; VASIL'YEVA, L., red.; MUKHIN, Yu., tekhn. red.

[Today and tomorrow; facts and figures about the standard of living of the Soviet people]Segodnia i zavtra; tsifry i fakty ob urovne zhizni sovetskogo naroda. Moskva, Gospolitizdat, 1962. 126 p. (MIRA 15:11)

(Cost and standard of living)

KRYLOV, P.N.; MAYYER, V.F.; ZHIDKOVA, M.V.; LAGUTIN, N.S.; KOROVKIN, G.N.; KIRICHENKO, N.Ya.; AGABAB'YAN, E.M.; KUZ'MINA, Ye.I.; GALYNSKIY, V.T.; SKRYLEVA, V.N.; GLYAZER, L.S., red.; RYABOVA, Ye.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Planning national consumption in the U.S.S.R.; current problems] Planirovanie narodnogo potrebleniia v SSSR; sovremennye problemy. Pod red. V.F.Maiera i P.N.Krylova. Moskva, Izd-vo "Ekonomika," 1964. 134 p. (MIRA 17:1)

1. Moscow. Nauchno-issledovatel'skiy ekonomicheskiy institut.

KATS, V.I., doktor ekon. nauk; KIRICHENKO, V.N., kand. ekon. nauk; IVANOV, Ye.A.; SAID-GALIYEV, K.G.; LUK'YANOV, E.B.; MUSATOVA, V.A.; PLYSHEVSKIY, B.P., kand. ekon. nauk; STOMAKHIN, V.I.; KARPUKHIN, D.N., kand. ekon. nauk; KIRICHENKO, N.Ya.; ZHIDKOVA, M.V., kand. ekon. nauk; ANCHISHKIN, A.I.; KLINSKIY, A.I., kand. ekon. nauk; SOLOV'YEV, N.S.; KLOTSVOG, F.N.; VSYAKIKH, E.P.; LAGUTIN, N.S., kand.ekon. nauk; LEMESHEV, M.Ya., kand. sel'khoz.nauk; KORMNOV, Yu.F., kand. ekon. nauk; SAVIN, V.A.; TEREKHOV, V.F.; KUDROV, V.M., kand. ekon. nauk; AL'TER, L.B., doktor ekon. nauk, red.; KRYLOV, P.N., kand. ekon. nauk; LEPINKOVA, Ye., red.; KOKOSHKINA, I., mladshiy red.; ULANOVA,L., tekhn. red.

[Growth of the social product and the proportions of the national economy of the U.S.S.R.]Rost obshchestvennogo proizvodstva i proportsii narodnogo khoziaistva SSSR. Moskva, 1962. 453 p. (MIRA 16:2)

(Russia—Economic policy)

LEMESHEV, M.Ya.; LAGUTIN, N.S.; GREKULOV, L.F.; KRASNOV, V.D.; PRONIN, A.A.; YAKOVLEVA, T.V.; ANAN'YEVA, L.F.; KOLOSOVA, Ye.Ya.; MURASHKO, Yu.V.; GABIDULLIN, V.M.; POPOV, N.I.; POPOV, N.M.; STUDENKOVA, N.M.; SMYSLOVA, A.S.; PANIN, N.S., red.; PANIN, N.S., red.; GERASIMOVA, Ye.S., tekhn.red.

[Methods for creating an abundance of agricultural products in the U.S.S.R.] Puti sozdaniia izobiliia sel'sko-khoziaistvennykh produktov v SSSR. Moskva, Ekonomizdat, 1963. 317 p. (MIRA 16:6)

1. Sektor ekonomicheskikh problem sel'skogo khozyaystva Nauchno-issledovatel'skogo ekonomicheskogo instituta Gosplana SSSR (for all except Panin, N.S., Panin, N.S., Gerasimova).
(Farm produce)

LAGUTIN, Nikolay Stepanovich. Prinimala uchastiye YEGOROVA, L.A.; TRIFSIK, G.B., red.; BAZLOVA, Ye.M., mladshiy red.

[Problems of merging the living standards of workers and collective farmers] Problemy sblizheniia urovnia zhizni rabochikh i kolkhoznikov. Moskva, Ekonomika, 1965. 110 p. (MIRA 18:4)

LAGUTIN, P.K. [Lahutin, P.K.]; MAKUKHINA, G.A.[Makukhina, H.O.]

Age of certain effusives in the southwestern part of the Donets Basin. Geol. zhur. 18 no. 2:86-90 '58. (MIRA 11:7)
(Donets Basin--Geology, Stratigraphic)

AYZENVERG, D.Ye. [Aizenverg, D.IE.]; KONOPLINA, O.R.; LAGUTIN, P.K.

Stratigraphic correlation of Devonian sediments in the southern margin of the Donets Basin. Geol.zhur. 22 no.4:53-56 '62. (MIRA 15:9)

1. Institut geologicheskikh nauk AN UkrSSR.
(Donets Basin--Geology, Stratigraphic)

AYZENVERG, D.Ye. [Aizenverh, D.IE.]; BRAZHNIKOVA, N.Ye. [Brazhnikova, N.IE.]; ISHCHENKO, T.A.; LAGUTIN, P.K. [Lahutin, P.K.]

Carboniferous basalt layers in the Donets Basin. Geol.zhur. 23 no.1:73-78 '63. (MIRA 16:4)

1. Institut geologicheskikh nauk AN UkrSSR.
(Donets Basin—Basalt)

YEPATKO, Yu.M. [IEpatko, IU.M.]; LAGUTIN, P.K. [Lahutin, P.K.]; LALO, V.M.

Experimental data on the leaching of quartz-feldspar sandstones.
Geol.zhur. 23 no.1:89-92 '63. (MIRA 16:4)

1. Institut geologicheskikh nauk AN UkrSSR.
(Sandstone) (Leaching)

AYZENVERG, D.Ye.; BELEVTSEV, Ya.N.; BORDUNOV, I.N.; BORISENKO, S.T.; BULKIN, G.A.; GORLITSKIY, B.A.; DOVGAN', M.N.; ZAGORUYKO, L.G.; KAZAKOV, L.R.; KALYAYEV, G.I.; KARASIK, M.A.; KACHAN, V.G.; KISELEV, A.S.; LAGUTIN, P.K.; LAZARENKO, Ye.K.; LAZARENKO, E.A.; LAPITSKIY, E.M.; LAPCHIK, F.Ye.; LAS'KOV, V.A.; LEVENSHTEYN, M.L.; MALAKHOVSKIY, V.F.; MITKEYEV, M.V.; PRUSS, A.K.; SKARZHINSKIY, V.I.; SKURIDIN, S.A.; SOLOV'YEV, F.I.; STRYGIN, A.I.; SUSHCHUK, Ye.G.; TEPLITSKAYA, N.V.; FEDYUSHIN, S.Ye.; FOMENKO, V.Yu.; SHKOLA, T.N.; SHTERNOV, A.G.; YAROSHCHUK, M.A.; ZAVIRYUKHINA, V.N., red.

[Problems of metallogeny in the Ukraine] Problemy metallogenii Ukrainy. Kiev, Naukova dumka, 1964. 254 p. (MIRA 18:1)

1. Akademiya nauk URSR, Kiev. Instytut geologichnykh nauk.

LAGUTIN, P. M.

Tobacco Manufacture and Trade

More about the "golden" spindles. Tabak 13 no. 2, 1952

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

COUNTRY : USSR
CATEGORY : Cultivated Plants. Grains. Leguminous Grains. Tropical Cereals.
ABS. JOUR. : Ref Zhur -Biologiya, No. 5, 1959, No. 20253

Author : Ignatin, V.A.
INST. : State Commission on Variety Testing of Agric
TITLE : The Effect of Agrotechnical Methods on the Summer Wheat Yield in Smolenskaya Oblast.

ORIG. PUB.: Inform. biul. Gos. komis. po sortoizuch. s.-kh. kul'tur pri M-ve s. kh. SSSR, 1958, No.7, 29-35

ABSTRACT : No abstract

Cultured Crops of the Ministry of Agric.USSR

CARD : 1/1

18(3)
SOV/21-59-3-14/27

AUTHORS: Lagutin, V.P., and Titov, V.K.

TITLE: A Study of Residual Stresses in Cast Iron Hardening (Izucheniye ostatochnykh napryazheniy pri zakalke chuguna)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 3, pp 290-293 (USSR)

ABSTRACT: The authors studied the interdependence among 1) the value of longitudinal residual stresses arising when hardening of cast iron, 2) the hardening medium and 3) the graphite dispersity. They employed the formula

$$= - \frac{d}{df} \quad E \; K \; /mm^2,$$

wherein is the area of cut left over after facing, $\frac{d}{df}$ is a derivative, is relative change

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A Study of Residual Stresses in Cast Iron Hardening

of length after facing, Δ is cut-off area, E is modulus of elasticity = 1.10^4 kg/mm^2. The cast iron used in examinations was of two sorts, one containing 2.90% C, 1.80% Si, 0.70% Mn, 0.158% P, 0.92% S, another containing 3.35% C, 1.88% Si, 0.66% Mn, 0.110% P and 0.100% S. The specimens were 60 mm long, 25 mm in diameter. Heating for hardening was done in a salt bath, and lasted 20 minutes. After hardening in water and oil, the hardness in the cross cut reached 48-50 units Rc. The cast iron's graphite was small, lamillar, rectilinear, with local turbulences. The examination showed that the nature of stress distribution was complex, and changed its sign several times. The presence of tensile stresses on the surface of the specimens could be explained by the predominance of structural stresses. The decrease of graphite dispersity diminished the tensile stresses. A rise in the temperature

A Study of Residual Stresses in Cast Iron Hardening

of hardening in water instead of oil increased the stresses. There are 3 graphs, 1 table and 10 Soviet references.

ASSOCIATION: Nikolayevskiy sudostroitel'nyy institut (Nikolayev Shipbuilding Institute)

PRESENTED: August 5, 1958, by V.N. Svechnikov, Member of the AS UkrSSR

18(3),7(0)

AUTHORS: Titov, V. K., Lagutin, V. P. SOV/32-25-1-36/51

TITLE: On the Errors of Determination According to the Mechanical Method of Residual Stresses in the Hardening of Gray Cast Iron (O pogreshnostyakh opredeleniya mekhanicheskim sposobom ostatochnykh napryazheniy pri zakalke serogo chuguna)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 1, pp 99-100 (USSR)

ABSTRACT: The investigations of the subject mentioned in the title were carried out according to the method of the determination of longitudinal residual stresses (occurring in hardening) (Ref 1). The method is based on the successive removal by turning of the surface layers from the specimen as well as on the determination of sample-length variation caused by disturbance of the state of stress. In order to ascertain the mean square error of determination the length and diameter of the sample were measured 20 times after each turning. The relative sample-length variation after turning is given to be

$$\lambda = \frac{L_{\text{turned}} - L_{\text{not turned}}}{L_{\text{calculated}}}$$

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On the Errors of Determination According to the Mechanical Method of Residual Stresses in the Hardening of Gray Cast Iron

SOV/32-25-1-36/51

On the application of the equations mentioned it is stated that at 13 layer removals $\Delta\sigma$ shows a mean arithmetic value of $\pm$ 0.28 kg/mm^2. It may be assumed that the mechanical method of stress determination is very accurate. There are 3 Soviet references.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut im. admirala S. O. Makarova (Nikolayevsk Shipbuilding Institute imeni Admiral S. O. Makarov)

Card 2/2

SOV/137-58-10-21299

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 122 (USSR)

AUTHORS: Tikhomirov, V. I., Ipat'yev, V. V., Lagutina, A. G.

TITLE: Investigation of the Range of Homogeneity of Wüstite at a Temperature of 980°C (Issledovaniya oblasti gomogennosti vyustita pri temperature 980°)

PERIODICAL: Uch. zap. LGU, 1957, Nr 227, pp 151-162

ABSTRACT: The range of homogeneity of wüstite formed on Armco Fe at 980° was investigated with the aid of a method based on periodic weighing and passing through the reaction tube of the furnace during oxidation of a mixture of steam and H_2 of various composition. A relationship is established between the composition of the gaseous phase and the equilibrium composition of the wüstite. The range of homogeneity of wüstite obtained at 980° lies within the limits of 75.3 - 77.95% Fe. The experimental data are generalized by a single approximate equation: $\log_{10}(Fe^{3+}/Fe^{2+}) = -3.7 + 8500/T + 0.25\log_{10}P_{O2}$.

1. Iron oxides--Analysis 2. Iron oxides--Temperature factors

Card 1/1 G. M.

STEPANYAN, Ye.P.; LAGUTINA, A.I.

Level of prothrombin, fibrinogen, heparin and of the protein fractions in the blood prior to and following surgery. Grud. khir. 1 no.3:52-56 My-Je '59. (MIRA 15:3)

1. Iz Instituta grudnoy khirurgii (dir. - prof. A.A. Busalov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR.
Adres Ye.P. Stepanyana: Moskva, Leninskiy prosp., d.8, Institut grudnoy khirurgii AMN SSSR.

(BLOOD)
(OPERATIONS, SURGICAL)

LAGUTINA, A.I. (Moskva, B.Cheremushinskaya ul., 96,korp.1,kv.55a)

Changes in the condition of congenital heart cases of the "blue" type and reasons for the development of terminal states in these patients. Grud. khir. 2 no.2:25-31 Mr-Ap'60. (MIRA 16:7)

1. Iz laboratorii profilaktiki i lecheniya shoka i terminal'nykh sostoyaniy (zav.-starshiy nauchnyy sotrudnik Ye.M.Smirenskaya) Instituta grudnoy khirurgii AMN SSSR (dir.-prof.A.A.Busalov).
(HEART--ABNORMITIES AND DEFORMITIES)

GEL'SHTEIN, G.G.; IVANITSKAYA, M.A.; LAGUTINA, A.I.; SAVEL'YEV, V.S.; SOBOLEVA, A.D.; FROLOVA, L.F.

Rare congenital heart defect - cor triloculare biatriatum. Klin. med. 38 no.6:129-135 Je '60. (MIRA 13:12)
(HEART--ABNORMITIES AND DEFORMITIES)

BURAKOVSKIY, V.I.; MURAV'YEV, M.V.; GEL'SHTEYN, G.G.; YEVTEYEV, Yu.V.; LAGUTINA, A.I.; ROMASHOV, F.N.; RYABOV, G.A.; ROSLAVLEVA, N.G.; TERENT'YEVA, L.M.; SHPUGA, O.G.

Operation on the "dry" heart during hypothermia in patients with congenital heart defects. Grud.khir. no.3:3-14 '61. (MIRA 14:9)

1. Iz otdeleniya zabolevaniya serdtsa i sosudov u detey (zav. - kand.med.nauk V.I. Burakovskiy) Instituta grudnoy khirurgii (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akad. A.N. Bakulev) AMN SSSR. Adres avtorov: Moskva, Leningradskiy prosp., d.8. Institut grudnoy khirurgii AMN SSSR.

(HEART--ABNORMITIES AND DEFORMITIES) (HYPOTHERMIA) (PERFUSION PUMP (HEART))

KOLESNIKOV, S. A.; KYABOV, G. A.; GELSHTEYN, G. G.; LAGUTINA, A. I.; KOLESNIKOVA, N. I.; KISS, S. Ya. (Moscow)

"L'insuffisance respiratoire aigue et son traite apres les interventions cardiovasculaires effectuees en circulation extracorporelle."

report submitted for 13th French Cong on Anesthesiology, Bordeaux, 31 May-3Jun 63.

SMIRENSKAYA, Ye.M.; LAGUTINA, A.I.

Effect of different types of anesthesia on the development and treatment of terminal states. Grud. khir. 6 no.4:93-98 Jl-Ag '64. (MIRA 18:4)

1. Laboratoriya klinicheskoy fiziologii (zav. - prof. A.G. Rukhtiyarov) i laboratoriya anesteziologii (zav. - kand.med.nauk G.A.Ryabov) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A.Kolesnikov) nauchnyy rukovoditel' - akademik A.N.Bakulev, AMN SSSR, Moskva. Adres avtorov: Moskva, V-49, Leninskiy prospekt, d.8, Institut serdechno-sosudistoy khirurgii.

ACC NR: AP6033211 (N) SOURCE CODE: UR/0229/66/000/009/0050/0052

AUTHORS: Barannik, V. P.; Lagutina, A. G.; Miroshnichenko, Yu. M.; Cherevko, T. G.

ORG: none

TITLE: Investigation of contact corrosion of welded joints in body steels under sea water

SOURCE: Sudostroyeniye, no. 9, 1966, 50-52

TOPIC TAGS: sea water corrosion, steel welding, corrosion rate, carbon steel, steel, austenitic steel / 09G2 steel, SKhL-4 steel, Yu3 steel, AK-25 steel, AK-29 steel, 3S steel, 4S steel

ABSTRACT: Corrosion stability of body steels 09G2, SKhL-4, Yu3, AK-25, AK-29, 3S, and 4S has been investigated in contact with each other as well as on control samples. The study was performed in the Black Sea. The contact of the body steels was accomplished by hand arc welding with electrodes of the austenitic class. The first five steels were subjected to total, irregular, and algae-type corrosion, the remaining two steels—to total, uniform corrosion. The rate of corrosion was found to be within the limits of K_{av} = 0.10 - 0.20 mm/year, K_{max} = 0.30 mm/year. Towards the end of the 3-year experimental period the corrosion rate tapered down to 0.05 mm/year. Steel Yu3 in contact with steels AK-25 and AK-29 behaves as anodic material and when the ratio

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UDC: 620.193.27

ACC NR: AP6033211

of surfaces is 1:1 its corrosion rate doubles (as compared with controls). Increase of the area of the anodic material in the welded joint to the ratio 2:1 protects the Yu3 steel from the contact effect of AK-25 steel. Seams welded with austenitic electrodes assure high corrosion stability of joints in sea water. Orig. art. has: 2 tables.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

Card 2/2

LAGUTINA, L. Ye.

LYUDMYLA YEVGEN'YEVNA

LAGUTINA, L. Ye.: "Clinical-neurohistological data on the state of the gastrointestinal tract in pneumonia of young children." Min Health RSFSR. Saratov State Medical Inst. Saratov, 1956. (Dissertation for Degree of Candidate in Medical Sciences).

SO: Knizhnaya letopis', No 23, 1956

LAGUTINA, L.Ye., kand. med. nauk; ZHELYAKOVA, A.V.; FURSIKOVA, V.L.

Symmetrical bilateral necrosis of the renal cortex in children. Pediatriia 41 no.10:72-75 O '62.
(MIRA 17:2)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - dotsent S.B. Davidson) Saratovskogo meditsinskogo instituta i prozektury klinicheskogo gorodka Saratovskogo meditsinskogo instituta (zav. patologoanatomicheskim otdeleniyem R.A. Utts).

LAGUTINA, M.A.

TETYUREV, V.A.; LAGUTINA, M.A., red.; TSIRUL'NITSKIY, N.P., tekhn.red.

[Botany; a textbook for students for grades 5 and 6 of seven-year and secondary schools] Botanika; uchebnik dlia V - VI klassov semiletnei i srednei shkoly. Moskva, Gos. ucheb.-pedagog. izd-vo M-va prosv. RSFSR, 1949. 207 p. (MIRA 11:4)
(Botany)

YEGOROV, K.D., kand.ekon.nauk; TROSHINA, A.P.; KOVALEV, P.P.; NOVIKOVA, A.A.; LAGUTINA, M.V.; VOLNINA, N.A.; SHESTAKOVA, R.V.; AKIMCHENKO, O.Ye.; KULEBAKIN, V.S., akademik, red.; VEYTS, V.I., red.; BUTENKO, A.F., kand.filosof.nauk, red.; RYBINSKIY, M.I., red.; CHASHNIKOVA, M.V., red.; NIZHNYAYA, S., red.; VOSKRESENSKAYA, T., red.; CHEKHUTOVA, V., red.; RKLITSKAYA, A.D., red.; CHEPELEVA, O., tekhn.red.

[Works of the State Commission for the Electrification of Russia; documents and materials] Trudy Gosudarstvennoi komissii po elektrifikatsii Rossii GOELRO; dokumenty i materialy. Red.komissiia: V.S.Kulebakin and others. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 306 p. (MIRA 14:2)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennaya komissiya po elektrifikatsii Rossii. 2. Chlen-korrespondent AN SSSR (for Veyts). (Electrification)

LAGUTINA, N. I.

Lagutina, N. I. "Test of 'proteozogen' preparation for treatment of abscessed wounds of thin tissue," Sbornik nauch. trudov (Ros. n/D gos. med. in-t), Vol. VIII, 1948, p. 197-202

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

LAGUTINA N. I.

FA 151T70

USSR/Medicine - Reflexes, Conditional Sep/Oct 49
Stimuli, Electrical

"Electrical Discharges of the Subcortical Region With the Aid of Prolonged Exciting Electrodes as Signals of Conditioned Reflexes," N. I. Lagutina, Chair of Physiol, Rostov Med Inst, 11½ pp

"Iz Ak Nauk SSSR, Ser Biol" No 5 pp. 548-9

Describes introduction of electrodes into a trepanned area in eight cats. Electrical stimuli of various parts of the subcortical region produced different results as to effect and influence

151T70

USSR/Medicine - Reflexes, Conditional Sep/Oct 49
(Contd)

on the course of habitual, especially alimentary, reactions. In one case, during excitation, an abrupt inhibition of conditioned and unconditioned components of alimentary reactions was observed, but none in four other cases. Combination of threshold electrical stimuli of the optic region and the corpus striatum developed an alimentary motor reflex to the electric signal demonstrated by the cats' dash for food in four cases. Many peculiarities arising in the course of developing a conditioned reflex have given rise to many hypotheses on its formative processes. Submitted by Acad. L. A. Orbeli, 27 Jun 49.

151T70

LAGUTINA, N.I.

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I Rozhanskiy, N.A. O raspolozhyenii podkorkovykh pishchyeykh tsyentrov. Fiziol zhurnal sssr Im. Syechyenova, 1949, No 5, s. 587-93.--Bibliogr: s. 593
LUIZOV, A.V. Iovyy myetol opryedyelyeniya effyektivnogo vryemyeni sokhranyeniya zrityel'nogo vpyechatlyeniya.--SM. 29589

SO: LETOPIS' NO. 40

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Yawning reaction as conditioned stimulant. Fiziol.zhur.40 no.1:23-33 Ja-F '54. (MLRA 7:2)

1. Kafedra normal'noy fiziologii Rostovskogo n/D. meditsinskogo instituta. (Yawning) (Conditioned response)

LAGUTINA, Nina Ivanovna

(Rostov-on-Don State Medical Inst), Academic degree of Doctor of Biological Sciences, based on her defense, 3 March 1955, in the Council of the Inst of Experimental Medicine Acad Med Sci USSR, of her dissertation entitled: "Research on the central mechanisms of digestive, defensive, orientation, and other reflexes under direct electrical irritation of different points of the brain."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 18, 10 Sep 55, Byulleten' MVO SSR, No. 17, Sep 56, Moscow, pp 9-16, Uncl. JPRS/NY-435

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EXCERPTA MEDICA Sec.2 Vol.10/2 Physiology,etc Feb57

815. LAGUTINA N.I., ROZHANSKI N.A and URMACHEYEVA T.G. Dept. of Normal Physiol., Med. Inst. of Rostov. *Data on the characteristics of the 'old' cerebral cortex FIZIOL. Z. 1956, 42/7 (533-540) Tables 2 Illus. 6 (Russian text)

In chronic experiments, small bipolar electrodes were inserted at different points in the brain of cats. The same electrodes were used for stimulation and EEG recording. The mosaic pattern of focal centres of excitation was found only in the phylogenetically more recent parts of the cerebral cortex, while the phylogenetically older parts of the cortex showed a more uniform state of excitation.

Simonson - Minneapolis, Minn.

USSR / Human and Animal Physiology (Normal and Patholo- T
gical). Nervous System. Subcortical Nuclei

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97861

Author : Rozhanskiy, N. A., Lagutina, N. I.

Inst : Not given

Title : On the Question of the Significance of the Nuclei of the "Striopallidarnoy" System

Orig Pub: Fiziol. zh. SSSR, 1957, 43, No 7, 622-628

Abstract: In 12 cats and 3 monkeys, with the aid of permanently implanted electrodes, various stations of the brain in the region of the stria pallidar system were irritated with histiological control of the point of irritation (20 stations altogether). With liminal stimulation of the tracts of internal

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1. From the department of physiology, Medical Institute, Rostov-on-the Don.

(REFLEX, CONDITIONED,
natural conditioned salivation reflexes in Rhesus monkeys (Rus))
(REFLEX,
unconditioned in Rhesus monkeys (Rus))
(SALIVATION,
unconditioned & natural conditioned salivation reflexes in Rhesus monkey)

LAGUTINA, N.I.; VODOP'YANOVA, M.A.

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1. Chair of Normal Physiology, Rostov Medical Institute.
(CONDITIONED RESPONSE) (AGING)

LAGUTINA, N.I., prof., red.; LAPIN, B.A., doktor med. nauk, red.; CHERKOVICH, G.M., kand. med. nauk, red.; SOLOPAYEV, B.P., kand. med. nauk, red.; DIKOVENKO, Ye.A., kand. med. nauk, red.; FUFACHEVA, A.A., mladshiy nauchnyy sotr., red.; AVAKOV, P.V., tekhn. red.

[Problems in the physiology and pathology of monkeys]Voprosy fiziologii i patologii obez'ian; sbornik rabot. Sukhumi, 1961. 339 p. (MIRA 15:11)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut eksperimental'noi patologii i terapii, Sukhum.
(MONKEYS--PHYSIOLOGY)

RAUSHENBAKH, M.O.; SUKYASYAN, G.V.; KOZINETS, G.I.; TSESSARSKAYA, T.P.; NOVIKOVA, M.N.; KAZANOVA. L.I.; CHERNOV, G.A.; LAGUTINA, N.Ia.; CHERTKOV, I.L.

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(MARROW—TRANSPLANTATION) (RADIATION SICKNESS)

LAGUTINA, N.I.; URMANCHEYEVA, T.G.; KOROLEVA, L.V.

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1. From the Laboratory of Physiology and Pathology of Higher Nervous Activity Institute of Experimental Pathology and Therapy, Sukhumi.

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Role of ecological factors in the process of acclimatization of Macaca rhesus in a breeding farm. Fiziol. zhur. 50 no.8:941-950 Ag '64. (MIRA 18:12)

1. Laboratoriya fiziologii i patologii vysshey nervnoy deyatel'nosti Instituta eksperimental'noy patologii i terapii AMN SSSR, Sukhumi.

LAGUTINA, N.I.; DZHALAGONIYA, Sh.L.

Role of the parietal area of the cerebral cortex in conditioned motor food reflexes in monkeys. Zhur. vys. nerv. deiat. 14 no.5:789-793 S-O '64. (MIRA 17:12)

1. Laboratory of Physiology and Pathology of Higher Nervous Activity, Institute of Experimental Pathology and Therapy, U.S.S.R. Academy of Medical Sciences, Sukhumi.

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1. Institut eksperimental'noy patologii i terapii AMN SSSR, Sukhumi.
Submitted July 13, 1965.

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(OBITUARIES
Rozhanskii, Nikolai A. (Rus)

LAGUTINA, N.Ya.

Change in the blood coagulation system in acute radiation sickness. Med.rad. no.5:76-81 '61. (MIRA 14:11)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i pereliyaniya krovi Ministerstva zdravookhraneniya SSSR.
(RADIATION SICKNESS) (BLOOD—COAGULATION)

KASATKIN, YE. V., Docent; LAGUTINA, N. Ya.

Stomach - Cancer

Secondary pellagra in gastric cancer. Sov. med. 16 No. 8, 1952.

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"Experience of Treatment and Prophylaxis of Radiation Disease with Leucocyte and Thrombocyte Masses."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sep 58.

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(MIRA 11:10)

1. Iz gospital'noy terapevticheskoy kliniki pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. A.A. Bagdasarov).

(HYPERTENSION, physiol.
gastric secretion (Rus))
(GASTRIC JUICE,
secretion in hypertension (Rus))

LABUTINA, N. YA.

21(4); 17(0) PHASE I BOOK EXPLOITATION SOV/2808

International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1958

Doklady sovetskikh uchenykh; radiobiologiya i radiatsionnaya meditsina (Reports of Soviet Scientists; Radiobiology and Radiation Medicine) Moscow, Izd-vo Glav. upr. po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR, 1959. 429 p. 8,000 copies printed. (Series: Vtoraya Mezhdunarodnaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Trudy, tom 5)

General Ed.: A.V. Lebedinskiy, Corresponding Member, USSR Academy of Medical Sciences; Ed.: Z.S. Shirokova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This book is intended for physicians, scientists, and engineers as well as for professors and students at vuzes where radiobiology and radiation medicine are taught.

COVERAGE: This is Volume 5 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held on September 1-13, 1958, in Geneva. Volume 5 contains 52 reports edited by Candidates of Medical Sciences S.V. Levinskiy and V.V. Sedov. The reports cover problems of the biological effects of ionizing radiation, future consequences of radiation in small doses, genetic effects of radiation, treatment of radiation sickness, uses of radioactive isotopes in medical and biological research, uses of atomic energy for diagnostic and therapeutic purposes, soil absorption of uranium fission products, their intake by plants, and their storage in plants and foodstuffs. References accompany each report.

Reports of Soviet Scientists (Cont.) SOV/2808

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Treatment of acute radiation sickness with concentrated thrombocytes. Probl.gemat. i perel.krovi 4 no.8:3-7 Ag '59. (MIRA 13:1)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR. 2. Deystvitel'nyy chlen AMN SSSR (for Bagdasarov).
(BLOOD TRANSFUSION)
(RADIATION INJURY ther.)

BAGDASAROV, A.A.; RAUSHENBAKH, M.O.; SUKYASYAN, G.V.; ABDULLAYEV, G.M.; NOVIKOVA, M.N.; LAGUTINA, N.Ya.; SAMOYLINA, N.L.; CHERNOV, G.A.

Some aspects of the clinical course and treatment of acute radiation sickness in monkeys. Med.rad. 4 no.9:17-24 S '59. (MIRA 12:11)

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1. Institut gematologii i perelivaniya krovi, Moskva.
(THROMBOPLASTIN) (RADIATION SICKNESS)